



Role of Unani usool e ilaj in PCOS - A Case Report

Sajini Loganathan^{1*}, Rumaiza Jahufer²

^{1*}Senior Registrar, Department of Gynecology and Obstetrics, National Ayurveda Teaching Hospital, Borella, Sri Lanka.

²Senior Lecturer, Consultant in Gyn. & Obs (Unani), Faculty of Indigenous Medicine, University of Colombo, Sri Lanka.

ABSTRACT

Background: Polycystic Ovary Syndrome (PCOS) is a hormonal, reproductive, and metabolic disorder that affects women of reproductive age. It is characterized by disrupted menstrual cycle, hyperandrogenism, acne, weight gain, hirsutism, diabetes, depression, mood swings, and sub fertility. In Unani system of Medicine, it is described under the term 'Ihtibas al-Tams' and 'Uqr'.

Case presentation: The subject of the study was 25 years old female; she was diagnosed as a case of PCOS. Treatment was planned which includes lifestyle modifications as well as pharmacotherapy (Josand e Ithrifal e muqil, Ithrifal Gududi and Maajoon Dabeedul-Ward and sufoof e muhazzil) and regimental therapy (Hamam e yabis and Hijamah ma e shurt). Evaluation of patient was done before and after treatment using USG as a tool. There was significant improvement during entire period of treatment.

Discussion: The purpose of this case study was to determine the benefits of Unani usool e ilaj as it is evidenced by this report. During the treatment period, the patient recovered her menstrual cycles regularly, improved depression and lost 6kg weight, normal USG study.

Keywords:

Ihtibas al-Tams, Uqr, Amenorrhea; Hirsutism, Hyperandrogenism, Unani medicine, Hijamah ma e shurt, Hamam -e- yabis..

Address for correspondence:

Sajini Loganathan
Senior Registrar

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INTRODUCTION

Polycystic ovarian syndrome is heterogenous in nature and, major multisystem endocrinopathy among reproductive-aged women. It was first described by Stein and Leventhal in 1935 [1]. A group of symptoms such as amenorrhea, hirsutism, infertility with bilateral polycystic ovaries, and thickened ovarian cortex are known as polycystic ovarian syndrome (PCOS).

It affects 4-20% of women worldwide in their reproductive age [3]. In 70% of PCOS patients, excessive hair growth primarily along the lower jaw, upper lip, and chin, is found [4]. As far as its etiology is concerned, it is heterogenous disorder which is characterized by production of excessive androgen mainly by the ovaries. It has been suggested that it may be due to pathology in up-regulation of enzymes in androgen biosynthesis and dysregulation of the CYP 11a gene [5].

PCOS includes clinical features such as oligomenorrhea, amenorrhea or DUB, hirsutism, recurrent abortions, obesity, infertility, acne, and acanthosis nigricans [5, 6]. According to American Society for Reproduction Medicine, diagnosis of PCOS is based upon the presence of any two of the following three criteria i.e., Oligo and/or anovulation, Hyperandrogenism (Clinical and/or biochemical) and Polycystic ovaries. Investigations to be done in PCOS include ultrasonography, serum levels of FSH, LH, TSH, prolactin, lipid profile. On USG, PCO can be diagnosed when ovarian volume is increased ($\geq 10\text{cm}^3$) and ≥ 20 follicles arranged peripherally per ovary. Each follicular cyst measures about 2-9mm in diameter [5].

In conventional systems of medicine, management of PCOS cases includes exercise, lifestyle modification, and pharmacotherapy such as metformin, gonadotrophins, ovulation inducers, progestins, combined oral contraceptives, and antiandrogens [5].

In the Unani system of medicine, the polycystic ovary disease is called as „Ikyas – e- Khusya-Ur- Reham. Unani physicians believe that health is a state of body, in which there is equilibrium in the humours and functions of the body. When the equilibrium of the humour specially balgham is disturbed quantitatively or qualitatively or both(1,2,3,4,5,6,7) It changes the temperament of affected organ resulting in disease and physiological functions are deranged due to

abnormal body temperament of affected organ or system resulting in this disease(5,6,7,8)

Almost all great unani physicians have explained the concept of PCOS (Ikiyas-e- khusyatur-reham) related with obesity (saman-e-mufarat) which can cause amenorrhea (ehthebas-e-tams), oligomenorrhoea (qilat-e-tams) leading to Infertility (uqur). In "Kitab Al Akseer "the cause of amenorrhea is explained as excess of fat in The body or sometimes increased cold temperament(su-al-mizaj barid of the body) or accumulation of thick viscid humour in the body. Al Majoosi in his book „Kamil us Sana“ and Zakariya Rhazi in his book „Al Hawi“ have explained that one of the cause of amenorrhea is obesity or excess of fat in women's body. Obesity leads to the obstruction of blood vessels may cause decrease blood flow to uterus. Infertility may occur due to obesity and excessive accumulation of fat in the uterus. Ilaj bit tadbeer is one of the effective modes of treatment that has been described in Unani system of medicine Wet cupping on calf muscles can induce menstrual bleeding. Hippocrates (360BC) recommended daily bathing and massage with fragrant oils. In Steam bath, heat causes evacuation of superfluous or morbid matter from the body, responsible for the development of diseases the holistic combination of hammam with measures like diet and exercise boost the immune system and promotes general wellbeing. The various treatments recommended by unani physicians are ilaj bil Ghiza, Ilaj bil Dawa, Ilaj bil Tad beer and Ilaj bil Yad keeping in view of the ancient and Modern literature, this usool e ilaj was selected.

Case presentation:

The subject of the study was 25 years old female; she was diagnosed as a case of PCOS. Treatment was planned which includes lifestyle modifications as well as pharmacotherapy (Josand e itrifal-e-muqil,ithrifal-e- Gududi and Maajoon Dabeedul-Ward) and Regimental therapy (wet cupping and steam bath) Evaluation of patient was done before and after treatment using USG report as a tool. There was significant improvement during entire period of treatment.

PATIENT INFORMATION

A female patient, age 25, made her way to the National Ayurveda Teaching Hospital located in Borella. On August 16, 2022, the main complaints were of weight increase over the previous ten years

and irregular menstruation with painfully little flow. Unmarried, she sought the opinion of numerous gynecologists and proceeded with the treatment as prescribed. The patient took the medication for a full year and a half, but as soon as she quit, the issue reappeared. An extensive and thorough history indicates that there was an initial gain in weight. Since menarche, the periods have been regular. Her period lengthened gradually over the course of two to three months, and it would only happen after cessation (cycle duration >4 months. The patient had a sedentary lifestyle, consumed junk food, and belonged to a high socioeconomic category. Following a general physical examination, the patient, who weighed 82 kg and stood 160 cm tall, was overweight. In order to rule out pathology, a USG of the abdomen and pelvis revealed bilateral polycystic ovaries. The diagnosis of PCOS was verified by irregular periods.

DIAGNOSTIC ASSESSMENT

On examination patients vital was stable. Her weight was 82 kg. She was examined systemically, and no

abdominal and pelvic mass or tenderness was found on local examination. Patient was advised to do Thyroid profile and USG abdomen and pelvis. USG documented Grade II Fatty Liver and hepatomegaly, Bilateral enlarged polycystic ovaries. Her TSH was normal. Based on history, examination, and USG report, the patient was diagnosed as a Case of Polycystic Ovarian disease.

THERAPEUTIC INTERVENTION

The treatment protocol was planned which included lifestyle modifications as well as Pharmacotherapy and Regimental therapy. In lifestyle modifications, patient was advised to do walking daily at least for 45 minutes and restrict junk food, fatty and fried diet. Patient was subsequently given josand e ithrifal e muqil ½ cup twice a day, ithrifal e Gududi in a dose of 5gm twice daily, Majoon Dabeedul-Ward in a dose of 5gm twice daily and Sufoof e Muhazzil 5gm Twice daily

Table. 1 Ingredients of Majoon Dabidul ward

Name	Botanical Name	Properties
1 SumbulutTib	(Valeriana officinalis)	Antispasmodic
2 Mastagi	(Pistacia lentiscus)	Astringent
3 Zafran	(Crocus sativus)	Antispasmodic, uterinetonic
4 Tabasheer	(Bambusa arundinacea)	Astringent, antispasmodic
5 Darchini	(Cinnamomum zeylanica)	Antispasmodic,astringent,antiseptic
6 Izkhar Makki	(Cymbopogon jwarancusa)	Antioxidant, anti-inflammatory
7 Asarun	(Asarum europaeum)	Anti-inflammatory, emmenagogue,
Diuretic, deobstruent		
8 Qust Sheerin	(Saussurea lappa)	Antiinflammatory, antimicrobial,
Antispasmodic		
9 Ghafis	(Agrimonia eupatoria)	Antimicrobial, antiinflammatory,
Analgesic, antioxidant		
10Tukhm Kasoos	(Cuscuta reflexa)	Antioxidant, antibacterial, diuretic

11. Majeth	(Rubia cordifolia)	Antibacterial, antiinflammatory,
Analgesic		
12 Luk Maghsool	(Coccus lacca)	Antiinflammatory, emmenagogue
13 Tukhm Kasni	(Cichorium intybus)	Antiinflammatory, emmenagogue
14 Tukhm Karafs	(Appium graveolens)	Antiinflammatory, antimicrobial
15 Zaravand	(Taveel Aristolochia longa)	Emmenagogue, anti-inflammatory
16 Habb-e Balsan	(Commiphora opobalsamum)	Antispasmodic, astringent,
Antiseptic, emmenagogue		
17 Ood Gharqui	(Aquilaria agallocha)	Astringent
18 Qaranfal	(Eugenia caryophyllata)	Antispasmodic, antiseptic
19 Dana Heel Khurd	(Elettaria cardamomum)	Resolvent, antispasmodic
20 Gul-e-Surkh	(Rosa damascene)	Astringent
21 Honey/ Sugar		Astringent, demulcent,
Emollient		

Table 2. Ingredients of Ithrifal e Gududi

1. Halela Siyah	(Terminalia chebula)	Glandular swelling
2. Aftimoon wilayati. (Cascutta Reflexa Roxib)		Anti-inflammatory, cytotoxic, antipyretic,
		Hepatoprotective, anticonvulsant, nematicide
		Anti-androgenic, hypocholesterolemic
		Antiandrogenic, hemolytic, diuretic,
		Dermatigenic, immunostimulant, antiarthritic,
		Antiasthma and anticancer activities
3. Post Balela. (Terminalia Belerica Roxb)		Glands of Neck's swelling, liver protective

Table. 3 Ingredients of Josand e Ithrifai e muqil

1. Muqil or Guggul /oleo-gum	(Commiphora mukul)	Inhibit the nuclear factor-kb, a regulator of
		Inflammatory response, and act as a potent
		Antagonist to the receptors of androgens,
		Mineralocorticoides, and glucocorticoids.
2. Halela siyah (Terminalia chebula)		Glandular swelling Alternative, Antipyretic
		Luxative, Astringent
3. Post Baleela	(Terminalia Belerica Roxb)	Glan of Neck's swelling, Liver protective
		Digestive correction, Anti Hyperlipidemic
4. Amla	(Phyllanthus emblica)	Anti inflammation,immunobooster,
		Anti-diabetic, anti-oxidant, vitamin A, C, E,
		Iron and calcium

Table. 4 Ingredients of Safoof e muhazzil

1. Tukhme badyan	(<i>Foeniculum vulgare</i>)	Anti-inflammatory, expulsion of
		Balgham,emenogoue, Diuretic ,analgesic
2. Nankhwa	(<i>Trachyspermum ammi</i>)	Anti spasmodic, Carminative, Laxative
3. Zeera Siyah	(<i>Carum carvi</i>)	Hepato tonic, Digestive,Astringent,
		Stomachic
4. Sudab	(<i>Ruta graveolens</i>)	Stimulent, Emenagogue,Abortifacient
		Diuretic
5. Marzanjosh	(<i>Origanum vulgare</i>)	Anti spasmodic, emenagogue, anti
		dote, Decongestent, stimulant, antiseptic
6. Luc Maghsool	(purified stick lac)	Cleansing, depurative, Resolvent

7. Bura Armani	(Borax)	Diuretic, Emmenagogue, Astringent, Antacid
Local sedative, Antiseptic		

Regimental Therapy

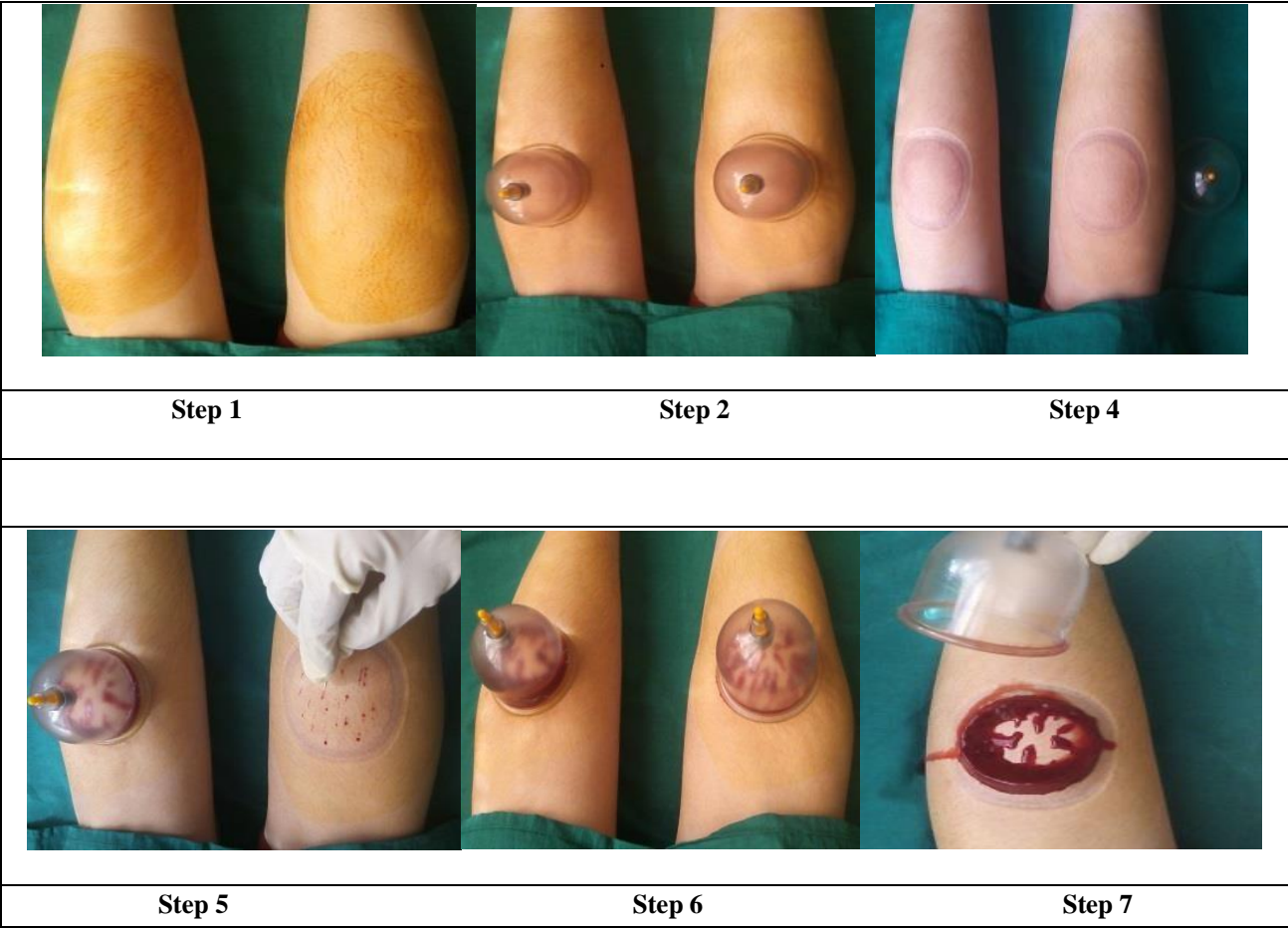
Hijama Mae shurt (wet cupping)

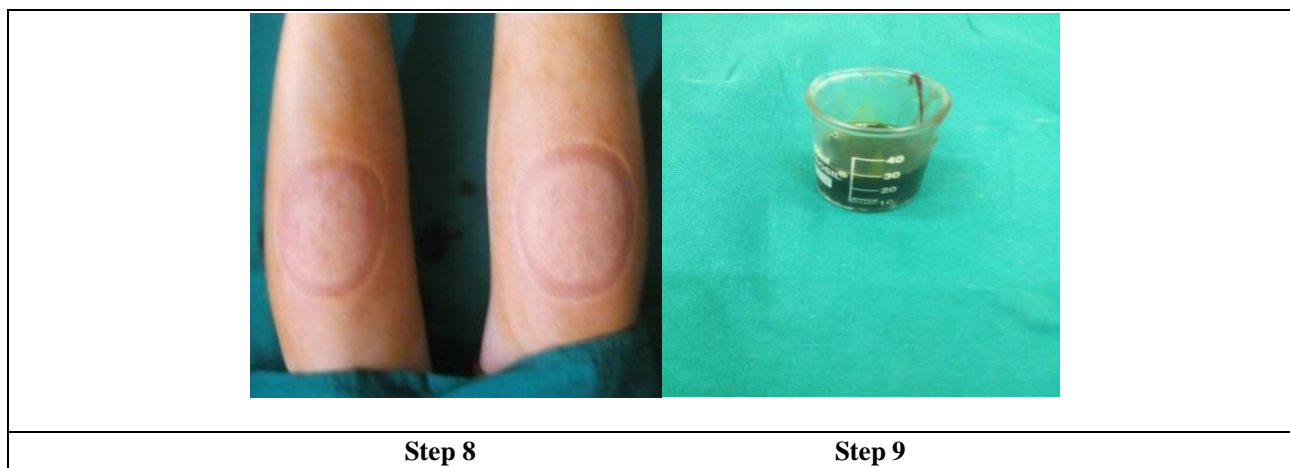
A weekly Hijama Mae shurt was scheduled once a month. Wet cupping therapy was administered while taking all necessary aseptic measures, and her vitals were documented. Procedure: It was requested that the patient lie down. A 10% povidone iodine solution was used to clean the calf muscle area, and the cupping area was noted. The cups were then inserted, one cup covering each calf muscle, to induce hyperemia. Following a 5-to 10-minute duration, the cups were taken out, and the hyperemic skin received 25–30 deep scarifications. The cups were reapplied with maximum negative pressure using a hand pump. The cups were kept for more than five or eight minutes.

After the pressure was released, blood was collected and measured out into a glass beaker to determine how much. Using cups, negative pressure, or suction force, is applied to the skin's surface during this minor surgical excision operation. Skin scarring raises the skin's barrier, allowing fluids combined with compounds that cause pathogenesis to pass through. One treatment approach that is thought to address humoral imbalance is wet cupping therapy. [11]

Several (25–30) incisions are made across the calf muscles for ehtebase tams, and cups are used to draw blood out of the wounds. The patient's identity was kept confidential and a USG report was taken both before and after the treatment.

Figure. 1. Clinical Application of wet cupping





Hamam Bukhari or Vapor bath or Steam bath:

In this kind of Hamam, the entire body is exposed to steam, which opens the skin's pores, promotes sweating, and helps the body expel toxins. It is also used to treat pain, typically musculoskeletal in nature, and helps with weight loss, amenorrhea, and nerve strengthening.

FOLLOW-UP AND OUTCOME

The patient was keenly observed throughout the treatment period. On 40th day of treatment, patient commenced periods which remained for 3-5 days and used 2-3 pads per day. The improvement was observed during entire period of treatment as patient had started regular cycles at an interval of 28-35 days. Pain also reduced. There were no side effects observed during the entire period of treatment. After the end of treatment, patient did USG which documented, as there was no ultrasonic appearance of polycystic ovaries.

RESULTS AND DISCUSSION

The result of the study revealed the evidence for mechanisms of effect for herbal medicine in oligo/amenorrhea, hyperandrogenism and PCOS. Majoon Dabidul Ward, Sufoof e muhazzil, Ithrifai e Gududi and Josand e ithrifal e muqil are effective in relieving most of the clinical features of poly-cystic ovarian syndrome, which is evidenced by decrease in pain during menstruation and improvement in menstrual problems and all clinical features and resolution of cyst in USG report.

All the Unani physicians have described the different etiological factors, especially focused on su-e-mizaj

barid (abnormal cold temperament), a potent factor of this disease precisely and systematically. Sue mizaj-e-barid leads to combination of sign and symptoms like menstrual abnormalities (Oligomenorrhea, amenorrhea), hirsutism, samane mufrat (obesity), acne, hoarseness of voice and uqr (infertility), which are suggestive of PCOS and hyperandrogenism. Ehtebas-e-tams (amenorrhea) is developed in women who have balghami mizaj (phlegmatic temperament), saman-e-mufrat (obesity) and zof-e-kabid (weakness of liver). The saman-e-mufrat (obesity) is caused by abnormal increase in ratoobat WA burudat. It may narrow the blood vessels and reduces blood circulation which leads to amenorrhea. Success full weight loss in obese women and overweight women with PCOS, though improved insulin sensitivity and serum insulin levels and favorable impact on metabolism, restoration of ovulation, menstrual cycle and fertility and hyper androgenic features. Insulin resistance and the associated hyper insulinemia is a driver for enhanced steroidogenesis. Hirsutism is caused due to long term amenorrhea. Main cause of infertility is saman-e-mufrat and qalilul nuzuj Mani (ovum) in obese women due to imbalance ratoobat WA burudat. The drugs selected in present study was has these major constituents, the effect of Majoon Dabidul Ward may be attributed to its anti-inflammatory, emmenagogue, antispasmodic, astringent, antiseptic, anti-microbial as well as antioxidant properties of all ingredients which are well documented in pharmacological and classical Unani literature. Similarly, it has been prescribed for relieving visceral inflammations [19]. The effect of Gugul in Josand e ithrifal e muqil Inhibit the nuclear factor-kb, a regulator of inflammatory response, and act as a potent antagonist to the receptors of androgens, mineralocorticoids, and glucocorticoids. Amla has anti-inflammatory, immunobooster, anti-

diabetic, anti-oxidant, rich in vitamin A, C, E, Iron and calcium

Sufoof e Muhazzil prescribed mainly for obesity, success full weight loss in obese women and overweight women with PCOS, improved insulin sensitivity and serum insulin levels and favorable impact on metabolism, restoration of ovulation, menstrual cycle and fertility and hyper androgenic features. Insulin resistance and the associated hyper insulinemia is a driver for enhanced steroidogenesis. Actions of Tukhme badyan anti-inflammatory, expulsion of (mukarikat e balgham) balgham, emenagogue, Diuretic, analgesic, Nankhwa has anti-spasmodic, Carminative, and Laxative.

Menstrual cycles are regularized by hijama Mae hurt without causing hormonal fluctuations. Tanqia-e-ghalba-e-khilt (evacuation of matter) and imala-e-mawad-aleel uzwa se uzue shirki Ki janib (diversion of matter to the related organ) are the two main goals of hijamah. Additionally, hijamas have therapeutic and health benefits. Improved general health, tanqiae mawad (benefit of detoxification), imalae mawad (diversion of materials), and the restoration of the equilibrium of balance of neuro-endocrine system and resumes normal physiological function. Hamam, the entire body is exposed to steam, which opens the skin's pores, promotes sweating, and helps the body expel toxins In Steam bath, heat causes evacuation of superfluous or morbid matter from the body. In The purpose of this one case study was to demonstrate Unani usool e ilaj's potential so that patients could benefit. Large-scale randomized clinical trials are required to assess and confirm the safety and effectiveness of Unani treatment.

CONCLUSION

This single case study concluded that lifestyle modifications as well as pharmacotherapy (Josand e Ithrifal e muqil, Ithrifal Gududi, Maajoon Dabeedul-Ward and sufoof e muhazzil) and in combination with regimental therapy (Hamam e yabis and Hijamah ma e shurt) are effective and safe in resolution of polycystic ovaries.

PATIENT CONSENT

The patient was informed about the disease, examination to be performed and type of treatment.

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